Mr. Richard Carpenter
Honeywell International, Inc.
3520 Westmoor Street
South Bend, IN 46628

Re: Significant Source Modification No:
141-11511-00172

Dear Mr. Carpenter:

Honeywell International, Inc., applied for a Part 70 operating permit (T-141-7442-00005) on December 10, 1996, for an aircraft landing system manufacturing operation. An application to modify the source was received on October 28, 1999. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction at the source:

(a) Three (3) CVD units (ID Nos. 22, 23 and 24) with an estimated batch capacity of 8800 pounds (initial weight) of brakes for random fiber process or 5300 (initial weight) of brakes for non-woven process. Each CVD has a nominal total reactant gas flow of 2000 scf per soak hour for random fiber process or a nominal total reactant gas flow of 4200 scf per soak hour for non-woven fiber process; and

(b) Three (3) enclosed flares to control VOC emissions from CVD Units 22, 23 and 24, each with a rated capacity of 5.5 million British thermal units per hour, piloted by natural gas, and exhausting through stacks S-FL-22, S-FL-23 and S-FL-24, respectively.

The proposed Significant Source Modification approval will be incorporated into the pending Part 70 permit application pursuant to 326 IAC 2-7-10.5(l)(3). If there are no changes to the proposed construction of the emission units, the source may begin operating on the date that IDEM receives an affidavit of construction pursuant to 326 IAC 2-7-10.5(h). If there are any changes to the proposed construction the source can not operate until an Operation Permit Validation Letter is issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, press 0 and ask for extension (2-8325), or dial (317) 232-8325.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments
JKJ

cc: File - St. Joseph County
U.S. EPA, Region V
St. Joseph County Health Department
Northern Regional Office
Air Compliance Section Inspector - Paul Karkiewicz
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

PART 70 SIGNIFICANT SOURCE MODIFICATION
OFFICE OF AIR MANAGEMENT

Honeywell International, Inc.
3520 Westmoor Street
South Bend, Indiana 46628-1373

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Source Modification No.: 141-11511-00172	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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SECTION A SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates an aircraft landing system manufacturing operation.

Responsible Official:	Adriane Brown
Source Address:	3520 Westmoor Street, South Bend, Indiana 46628-1373
Mailing Address:	3520 Westmoor Street, South Bend, Indiana 46628-1373
SIC Code:	3728
County Location:	St. Joseph
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source is approved to construct and operate the following new emission units and pollution control devices:

(a) Three (3) CVD units (ID Nos. 22, 23 and 24) with an estimated batch capacity of 8800 pounds (initial weight) of brakes for random fiber process or 5300 (initial weight) of brakes for non-woven process. Each CVD has a nominal total reactant gas flow of 2000 scf per soak hour for random fiber process or a nominal total reactant gas flow of 4200 scf per soak hour for non-woven fiber process; and

(b) Three (3) enclosed flares to control VOC emissions from CVD Units 22, 23 and 24, each with a rated capacity of 5.5 million British thermal units per hour, piloted by natural gas, and exhausting through stacks S-FL-22, S-FL-23 and S-FL-24, respectively.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because it is a major source, as defined in 326 IAC 2-7-1(22).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Permit No Defense [IC 13]

This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions [326 IAC 2-7-1]

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)][326 IAC 2-7-10.5(i)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

(a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section.

(1) If the affidavit of construction verifies that the emission units were constructed as proposed in the application, then the emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM.

(2) If the affidavit of construction verifies that actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.

(b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

(c) Upon receipt of an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the permittee shall attach it to this document.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, on the attached Certification Form, with each submittal.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this approval, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAM, upon request and the information in the Plan required by 326 IAC 1-6-3 shall be subject to review and approval by IDEM, OAM. IDEM, OAM, may require the Permittee to revise such information in its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) 326 IAC 2-7-11 or 326 IAC 2-7-12 govern whenever the Permittee seeks to amend or modify this approval.

(b) Any application requesting an amendment or modification of this approval shall be submitted to:

Indiana Department of Environmental Management

Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this approval:

(a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

C.5 Emission Statement [326 IAC 2-6]

(a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

(1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);

(2) Indicate actual emissions of other regulated pollutants (as that term is defined at 326 IAC 2-7-1(32)) from the source, for purposes of Part 70 fee assessment.

(b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided in this approval, all air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation, as described in Section D of this permit.

Testing Requirements [326 IAC 2-7-6(1)]

C.7 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

(a) Compliance testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

All monitoring and record keeping requirements contained in this permit and not already legally required shall be implemented upon commencing operation.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.9 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the document in which the information is found. The elements of the compliance monitoring plan are:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this approval;

(3) The Compliance Monitoring Requirements in Section D of this approval;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this approval; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this approval. CRP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this approval by the Permittee and maintained on site, and is comprised of:

(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this approval; and

(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this approval, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the approval unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.

(c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the approval conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the approval, and such request has not been denied or;

(3) An automatic measurement was taken when the process was not operating; or

(4) The process has already returned to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.10 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the corrective actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline.

(c) IDEM, OAM reserves the authority to take any actions allowed under law to resolve noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.11 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

(a) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, as required by Section D Compliance Monitoring and Record Keeping requirements, reasons for this must be recorded.

(b) At its discretion, IDEM may excuse such failures providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

(c) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.12 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Records of required monitoring information shall include, where specified in Section D:

(1) The date, place, and time of sampling or measurements;

(2) The dates analyses were performed;

(3) The company or entity performing the analyses;

(4) The analytic techniques or methods used;

(5) The results of such analyses; and

(6) The operating conditions existing at the time of sampling or measurement.

(c) Support information shall include, where specified in Section D:

(1) Copies of all reports required by this approval;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

(4) Records of preventive maintenance.

(d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

C.13 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) The reports required by conditions in Section D of this approval shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this approval, any notice, report, or other submission required by this approval shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] - The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.

(a) Three (3) CVD units (ID Nos. 22, 23 and 24) with an estimated batch capacity of 8800 pounds (initial weight) of brakes for random fiber process or 5300 (initial weight) of brakes for non-woven process. Each CVD has a nominal total reactant gas flow of 2000 scf per soak hour for random fiber process or a nominal total reactant gas flow of 4200 scf per soak hour for non-woven fiber process; and

(b) Three (3) enclosed flares to control VOC emissions from CVD Units 22, 23 and 24, each with a rated capacity of 5.5 million British thermal units per hour, piloted by natural gas, and exhausting through stacks S-FL-22, S-FL-23 and S-FL-24, respectively.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 BACT Condition [326 IAC 8-1-6]

An enclosed flare has been accepted as BACT for control of the VOC emissions from the CVD units 22-24. All exhaust process gas from the soak phase of the CVD unit's cycle shall be directed through the enclosed flare for VOC control. The enclosed flare shall operate at all times that the CVD unit is operating in the soak phase and shall achieve an overall destruction efficiency of ninety-eight percent (98%).

D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for the control device for this facility.

Compliance Determination Requirements

D.1.3 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

A compliance stack test shall be performed on one of the CVD unit flares to demonstrate compliance with the flare control efficiency specified in Condition D.1.1. This stack test shall be conducted within 60 days after the unit reaches maximum production rate, but no later than 180 days after initial start-up. This test shall be performed using a test protocol determined in conjunction with the IDEM, OAM Compliance Data Section.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.4 Monitoring

(a) To monitor the volatile organic compound (VOC) load to the control flare, the permittee shall measure the input rate of total reactant gas to the CVD unit once per day over the entire batch cycle and the number and type of brake disks in each batch.

(b) The enclosed flare shall have a flame present at all times that the CVD unit is operating in the soak phase. A thermocouple or equivalent device shall be installed and operated to monitor the presence of a pilot flame and to sound an alarm when the flame is not detected.

(c) In the event that a breakdown of the monitoring equipment occurs, the Permittee shall supplement monitoring with visual checks once per hour to ensure that a flame is present and shall implement appropriate response steps in its Compliance Monitoring Plan in accordance with Condition C.9 (Compliance Monitoring Plan - Failure to Take Response Steps). Failure to take response steps in accordance with Condition C.9, shall be considered a violation of this permit.

(d) The Permittee shall include in its PMP a maintenance program to inspect regularly the thermocouple or equivalent device for monitoring and recording the presence of a pilot flame, to conduct routine maintenance and calibration on such monitors.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.5 Record Keeping Requirements

(a) To document compliance with Condition D.1.1, the Permittee shall maintain a daily record of the total reactant gas input rate to the CVD and a log of the number and type of brake discs for each batch run.

(b) All records shall be maintained in accordance with Condition C.12 - General Record Keeping Requirements, of this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: Honeywell International, Inc.
Source Address: 3520 Westmoor Street, South Bend, Indiana 46628
Mailing Address: 3520 Westmoor Street, South Bend, Indiana 46628
Source Modification No.: 141-10759-00172

This certification shall be included when submitting documents required by this approval to be certified by a responsible official.

Please specify what document is being certified:

_____

_____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

Indiana Department of Environmental Management
Office of Air Management

Addendum to the
Technical Support Document for a Part 70 Significant Source Modification

Source Name:	Honeywell International, Inc.
Source Location:	3520 Westmoor Street, South Bend, Indiana 46628-1373
County:	St. Joseph
Source Modification No.:	141-11511-00172
SIC Code:	3728
Permit Reviewer:	Janusz Johnson

On January 9, 2000, the Office of Air Management (OAM) had a notice published in the *South Bend Tribune*, South Bend, Indiana, stating that Honeywell International, Inc., (formerly AlliedSignal, Inc.) had applied for a Part 70 Significant Source Modification to construct and operate three (3) new Carbon Vapor Deposition (CVD) units with internal flare controls which would be associated with the existing aircraft wheel and brake manufacturing operation. The notice also stated that OAM proposed to issue a permit for these new units and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On February 4, 2000, Honeywell International, Inc., submitted comments on the proposed source modification. The summary of the comments and corresponding responses is as follows (changes are bolded for emphasis):

Comment 1: Honeywell proposes the following change to the Section A narrative:

> This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation ~~that may render this descriptive information obsolete or inaccurate~~ may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

Response 1: The language of the Section A narrative has been revised as requested.

Comment 2: The following inaccurate information should be clarified in Section A.1:

Responsible Official:	~~Carl Montalbine~~ **Adriane Brown**
Source Address:	3520 Westmoor Street, South Bend, Indiana 46628-1373
Mailing Address:	3520 Westmoor Street, South Bend, Indiana 46628-1373
SIC Code:	3728
County Location:	St. Joseph
County Status:	~~Non-attainment for particulate matter (PM)~~, Attainment for all ~~other~~ criteria pollutants
Source Status:	Part 70 Permit Program

Response 2: Section A.1 has been revised to indicate that Adriane Brown has replaced Carl Montalbine as the Responsible Official. Additionally, the County Status information has been corrected as indicated because St. Joseph County is no longer considered non-attainment for particulate matter.

Comment 3: Honeywell proposes the following change to Item (a) of Condition C.1:

C.1(a) Where specifically designated by this approval or required by an applicable requirement, any ~~application form,~~ report, ~~or compliance certification~~ **prepared as required by and** submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Response 3: The language of Condition C.1, Item (a), is intended to reflect the intent and wording of 326 IAC 2-7-4(f) which states, "Any application form, report, or compliance certification submitted under this rule shall contain certification by a responsible official of truth, accuracy, and completeness." For clarification, the following changes have been made to Item (a) of the condition:

C.1(a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted ~~under this approval~~ shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Comment 4: Honeywell proposes the following change to Item (c) of Condition C.2:

C.2(c) PMP's shall be submitted to IDEM, OAM, upon request and **the information in the Plan required by 326 IAC 1-6-3** shall be subject to review and approval by IDEM, OAM. IDEM, OAM, may require the Permittee to revise **such information in** its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

Response 4: Item (c) of Condition C.2 has been changed as indicated to clarify that the requirement that the plan be subject to review is consistent with the underlying applicable State rule.

Comment 5: Honeywell proposes that the following condition (C.6) be removed from the permit:

~~C.6 Operation of Equipment [326 IAC 2-7-6(6)]~~
~~Except as otherwise provided in this approval, all air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation, as described in Section D of this permit.~~

Response 5: Condition C.6 is a generally applicable condition which establishes the regulatory authority and intent to require control equipment to be operated when the associated emission units are operating and venting to the control equipment. This condition clearly states that operation of controls under this condition is dependant on specific guidelines described in Section D and provides for any exceptions made elsewhere in the approval. There are provisions for operation of the control device in Condition D.1.1 used to comply with the applicable requirements of 326 IAC 8-1-6 (New facilities, general reduction requirements) which are consistent with the intent of the language in Condition

C.6. No change has been made as a result of this comment.

Comment 6: Honeywell proposes the following change to Item (a) of Condition C.7:

C.7(a) ~~Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval.~~ All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

Response 6: Item (a) of Condition C.7 (Performance Testing) shall be revised as follows because the time frame for testing is also specified in Condition D.1.3 (Testing Requirements) and, therefore, unnecessary and redundant in Condition C.7:

C.7(a) Compliance testing ~~on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing~~ shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

Comment 7: Honeywell proposes the following change to the language of Condition C.8:

C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
All monitoring and record keeping requirements contained in this permit and not already legally required **by a specific regulation** shall be implemented ~~upon commencing operation~~ **within ninety (90) days of approval issuance**.

Response 7: This condition does not relieve the permittee from any monitoring and record keeping requirements which are already legally required. This includes, but is not necessarily limited to, requirements under a specific regulation. The intent of monitoring and related record keeping requirements is to assure that all reasonable information is provided to evaluate continuous compliance with applicable requirements. A ninety (90) day period of transition has been allowed previously for bringing existing emission units into compliance with newly applicable monitoring and record keeping requirements established in a permit, but this approach is not necessary for new emission units. For new emission units the IDEM, OAM, considers it reasonable to require the permittee to implement the required monitoring and record keeping upon commencing operation. No change has been made as a result of this comment.

Comment 8: Honeywell proposes the following changes to Condition C.9 to reflect practical and reasonable requirements on the Permittee. The draft language is not specifically authorized by rule or regulation and imposes burdensome, ambiguous obligations on the Permittee.

C.9 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6] [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan ~~to ensure~~ that **includes the following elements.** ~~reasonable information is available to evaluate its continuous compliance with applicable requirements.~~ **[**The compliance monitoring plan can be either an entirely new document, consist of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the document in which the information is found.**]** ~~The elements of the compliance monitoring plan are~~:

(1) This condition;

(2) ~~The Compliance Determination Requirements in Section D of this approval;~~

(3) The Compliance Monitoring Requirements in Section D of this approval;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this approval; and

(5) A ~~Compliance R~~ **r**esponse ~~P~~ **p**lan ~~(CRP)~~ for each compliance monitoring condition of this approval. ~~CRP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and~~

~~approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this approval by the Permittee and maintained on site, and is comprised of:~~

~~(A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this approval; and~~

~~(B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.~~

~~(b) For each compliance monitoring condition of this approval, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the approval unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.~~

~~(c)~~**(b)** **Upon observing compliance monitoring data inconsistent with the standard compliance monitoring requirements in Section D,** ~~After investigating the reason for the excursion, the Permittee is excused from taking~~ **no** further ~~response~~ steps **by the Permittee are triggered** for any of the following reasons:

(1) The monitoring equipment malfunctioned, giving a false reading. ~~This shall be an excuse from taking further~~ **(Note: reasonable** response steps ~~providing that prompt action was taken~~ to correct the monitoring equipment **are required.)**

(2) The Permittee has determined that the compliance monitoring parameters established in the approval conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the approval, and such request has not been denied or;

(3) An automatic measurement was taken when the process was not operating; or

(4) The process has already returned **or is returning** to operating within "normal" parameters and no response steps are required.

~~(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.~~

Response 8: IDEM has worked with members of the Clean Air Act Advisory Council's Permit Committee, Indiana Manufacturing Association, Indiana Chamber of Commerce and individual applicants regarding the Preventive Maintenance Plan, the Compliance Monitoring Plan and the Compliance Response Plan. IDEM has clarified the preventive

maintenance requirements by working with sources on draft language over the past three years. The plans are fully supported by rules promulgated by the Air Pollution Control Board. The plans are the mechanism each permittee will use to verify continuous compliance with its permit and the applicable rules and will form the basis for each permittee's Annual Compliance Certification. Each permittee's ability to verify continuous compliance with its air pollution control requirements is a central goal of the Title V and FESOP permit programs.

The regulatory authority for and the essential elements of a compliance monitoring plan were clarified in IDEM's Compliance Monitoring Guidance, in May 1996. IDEM originally placed all the preventive maintenance requirements in the permit section titled "Preventive Maintenance Plan." The Preventive Maintenance Plan (PMP) had to set out requirements for the inspection and maintenance of equipment both on a routine basis and in response to monitoring. Routine maintenance was a set schedule of inspections and maintenance of the equipment. Response maintenance included inspection and maintenance in response to monitoring that showed that the equipment was not operating in its normal range. This monitoring would indicate that maintenance was required to prevent the exceedance of an emission limit or other permit requirement. The maintenance plan was to set out the "corrective actions" that the permittee would take in the event an inspection indicated an "out of specification situation", and set the time frame for taking the corrective action. In addition, the PMP had to include a schedule for devising additional corrective actions for situations that the source had not predicted in the PMP. All these plans, actions and schedules were part of the Preventive Maintenance Plan, with the purpose of maintaining the equipment to prevent an exceedance of an emission limit or violation of other permit requirements.

After issuing the first draft Title V permits in July of 1997, IDEM received comments from members of the regulated community regarding many of the draft permit terms, including the PMP requirements. One suggestion was to remove the corrective action and related schedule requirements from the PMP requirement and placed them into some other requirement. This suggestion was based, in some part, on the desire that a permittee's maintenance staff handle the routine maintenance of the equipment, and a permittee's environmental compliance and engineering staff handle the compliance monitoring.

IDEM agreed to separate the "corrective actions" and related schedule requirements from the PMP. These requirements were placed into a separate requirement named the Compliance Response Plan (CRP). In response to another comment, IDEM changed the name of the "corrective actions" to "response steps."

The CRP response steps and schedule requirements are examples of documenting procedures developed from good business practices and the prevention of environmental problems. Permittees already have maintenance schedules and trouble shooting guides that specify the steps to take when the equipment is not functioning correctly. The steps may involve some initial checking of the system to locate the exact cause, and other steps to place the system back into proper working order. Using the trouble shooting guide and the permittee's own experience with the equipment, the steps are taken in order and as scheduled until the problem is fixed.

No changes to the condition have been made as a result of this comment.

Comment 9: Honeywell proposes the following change to Item (c) of Condition C.12:

(c) Support information shall include, where specified in Section D:

(1) Copies of all reports required by this approval;

(2) All original strip chart recordings for continuous monitoring instrumentation;

(3) All calibration and maintenance records;

~~(4) Records of preventive maintenance.~~

Response 9: The IDEM, OAM, believes that records of preventive maintenance are necessary support information for demonstrating compliance with the requirements of the permit specified in Section D.1, Conditions D.1.2 (Preventive Maintenance Plan) and D.1.4 (Monitoring). No changes to the condition have been made as a result of this comment.

Comment 10: The language stricken from Condition D.1.1 [below] is not appropriate as an emission limitation or standard. This language, if necessary to be stated, belongs in the TSD.

D.1.1 BACT Condition [326 IAC 8-1-6]
An enclosed flare has been accepted as BACT for control of the VOC emissions from the CVD units 22-24. All exhaust process gas from the soak phase of the CVD unit's cycle shall be directed through the enclosed flare for VOC control. The enclosed flare shall operate at all times that the CVD unit is operating in the soak phase and shall achieve an overall destruction efficiency of ninety-eight percent (98%). ~~This level of control is equivalent to 1.2 tons of VOC per year for each CVD unit based on 5800 hours of operation.~~

Response 10: This language, intended to provide a basis for the BACT determination, has been removed from the condition. This information is generally descriptive and is in the TSD, which more substantially provides support for the BACT determination.

Comment 11: Honeywell proposes the following clarifications in Condition D.1.3:

D.1.3 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]
A Compliance stack test~~s~~ shall be performed on one of the CVD unit flares to demonstrate compliance with the flare control efficiency specified in Condition D.1.1. ~~These~~ **This** stack test~~s~~ shall be conducted within 60 days after the unit reaches maximum production rate, but no later than 180 days after initial start-up. ~~These~~ **This** test~~s~~ shall be performed using a test protocol determined in conjunction with the IDEM, OAM Compliance Data Section.

Response 11: Condition D.1.3 has been revised accordingly.

Comment 12: Honeywell proposes the following changes to Condition D.1.4:

D.1.4 Monitoring

(a) To monitor the volatile organic compound (VOC) load to the control flare, the permittee shall measure the input rate of total reactant gas to the CVD unit once per day over the entire batch cycle and the number and type of brake disks in each batch.

(b) The enclosed flare shall have a flame present at all times that the CVD unit is operating in the soak phase. A thermocouple or equivalent device shall be installed and operated to monitor the presence of a pilot flame and to sound an alarm when the flame is not detected. ~~The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~

(c) In the event that a breakdown of the monitoring equipment occurs, the Permittee shall supplement monitoring with visual checks once per hour to ensure that a flame is present **and shall implement its Compliance Monitoring Plan in accordance with Condition C.9.**

~~(c) The Permittee shall include in its PMP a maintenance program to inspect regularly the thermocouple or equivalent device for monitoring and recording the presence of a pilot flame, to conduct routine maintenance and calibration on such monitors.~~

Response 12: The IDEM, OAM, agrees to change Condition D.1.4 (Monitoring) to clarify the requirements of the condition. The requirement to have a maintenance program for the device monitoring and recording the presence of a pilot flame is considered necessary to ensure that the device is maintained in working order. It is left to the discretion of the permittee to determined the extent and frequency of such a program based on operating experience. The changes shall be as follows:

D.1.4 Monitoring

(a) To monitor the volatile organic compound (VOC) load to the control flare, the permittee shall measure the input rate of total reactant gas to the CVD unit once per day over the entire batch cycle and the number and type of brake disks in each batch.

(b) The enclosed flare shall have a flame present at all times that the CVD unit is operating in the soak phase. A thermocouple or equivalent device shall be installed and operated to monitor the presence of a pilot flame and to sound an alarm when the flame is not detected. ~~The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~

(c) In the event that a breakdown of the monitoring equipment occurs, the Permittee shall supplement monitoring with visual checks once per hour to ensure that a flame is present. **and shall implement appropriate response steps in its Compliance Monitoring Plan in accordance with Condition C.9 (Compliance Monitoring Plan - Failure to Take Response Steps). Failure to take response steps in accordance with Condition C.9, shall be considered a violation of this permit.**

~~(c)~~**(d)** The Permittee shall include in its PMP a maintenance program to inspect regularly the thermocouple or equivalent device for monitoring and recording the presence of a pilot flame, to conduct routine maintenance and calibration on such monitors.

Comment 13: Honeywell proposes the following clarification to Item (b) of Condition D.1.5:

D.1.5 (b) All records shall be maintained in accordance with Section C**.12** - General Record Keeping Requirements, of this permit.

Response 13: The following clarification has been made to Item (b) of Condition D.1.5:

D.1.5(b) All records shall be maintained in accordance with ~~Section~~ **Condition** C**.12** - General Record Keeping Requirements, of this permit.

Comment 14: The Enforcement Issue section of the TSD is not accurate. The enforcement actions have been resolved. This paragraph should be stricken from the TSD.

Response 14: To maintain a history of the permit process from draft to finalization, the Technical Support Document (TSD) will not be changed because the TSD establishes a basis for the permit determinations and any changes which are made to those determinations as a result of comments received. Any inconsistencies between changes made to the permit as a result of comments and the TSD will be covered in this Addendum to the TSD.

During the review of the application and proposal of the draft of this Significant Source Modification, there was a pending enforcement action against Honeywell International, Inc. (formerly AlliedSignal, Inc.). This enforcement issue has been resolved.

Comment 15: The Stack Summary section of the TSD should reflect accurate information regarding temperature.

Response 15: The following is a revised Stack Summary:

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (scfm)	Temperature (^{0}F)
S-FL-22	CVD-22 flare	40	3.2	2890	**1600**
S-FL-23	CVD-23 flare	40	3.2	2890	**1600**
S-FL-24	CVD-24 flare	40	3.2	2890	**1600**

Comment 16: The Source Status section of the TSD is based on outdated emissions data. The 1999 emission data reflecting the operations with controls is the most current information and should be included to reflect accurately the status quo.

Response 16: The intent of the table in the Source Status section of the TSD (Page 3) is to reflect the level of emissions allowed for all emission units at the source by existing permits, including applicable limits and controls which are Federally enforceable. This Significant Source Modification is intended to address the review requirements for the new emission units requested based on the best available information and is not a comprehensive review of the entire source. The best available information on source wide emissions potential at the time of review was used. Changes in the existing source status will be most appropriately addressed during the processing of Honeywell's Part 70 Major Source Operating Permit application which entails review of all facilities at the source. Any changes due to recent permitting and the most current emission data will be addressed at that time.

Comment 17: The discussion regarding Compliance Requirements in the TSD must be consistent with the changes to the terms and conditions of the permit.

Response 17: As stated in the response to Comment 14, any inconsistencies between changes made to the permit as a result of comments and the TSD will be covered by this Addendum to the TSD.

Comment 18: The Source Modification Certification form must be modified to reflect accurately the permit terms and conditions regarding certification.

Response 18: The revised form shall be as follows (next page):

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: Honeywell International, Inc.
Source Address: 3520 Westmoor Street, South Bend, Indiana 46628
Mailing Address: 3520 Westmoor Street, South Bend, Indiana 46628
Source Modification No.: 141-10759-00172

This certification shall be included when submitting documents required by this approval to be certified by a responsible official.

Please specify what document is being certified:

_____

_____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

Indiana Department of Environmental Management
Office of Air Management

Technical Support Document (TSD) for a Part 70 Significant Source Modification.

Source Background and Description

Source Name:	**Honeywell International, Inc.**
Source Location:	**3520 Westmoor Street, South Bend, Indiana 46628**
County:	**St. Joseph**
SIC Code:	**3728**
Operation Permit No.:	**T 141-7442-00172**
Operation Permit Issuance Date:	**(review pending)**
Significant Source Modification No.:	**141-11511-00172**
Permit Reviewer:	**Janusz Johnson**

The Office of Air Management (OAM) has reviewed a source modification application received on October 28, 1999, from Honeywell International, Inc. (formerly AlliedSignal, Inc.) relating to the construction of the following new emission units and pollution control devices:

(a) Three (3) CVD units (ID Nos. 22, 23 and 24) with an estimated batch capacity of 8800 pounds (initial weight) of brakes for random fiber process or 5300 (initial weight) of brakes for non-woven process. Each CVD has a nominal total reactant gas flow of 2000 scf per soak hour for random fiber process or a nominal total reactant gas flow of 4200 scf per soak hour for non-woven fiber process; and

(b) Three (3) enclosed flares to control VOC emissions from CVD Units 22, 23 and 24, each with a rated capacity of 5.5 million British thermal units per hour, piloted by natural gas, and exhausting through stacks S-FL-22, S-FL-23 and S-FL-24, respectively.

History

The Office of Air Management (OAM) issued a Construction Permit (CP 141-9999-00172) to AlliedSignal, Inc., on December 14, 1998. This permit covered the construction and operation of twenty (20) internal flares to control volatile organic compounds (VOC) from the twenty (20) Carbon Vapor Deposition (CVD) units associated with the existing aircraft wheel and brake manufacturing operation. This permit was modified on October 20, 1999 (Modification No. 141-11205-00172). Also on October 20, 1999, a Significant Source Modification (No. 141-10759-00172) approving construction and operation of CVD Unit 21 was issued. Review under the Prevention of Significant Deterioration (PSD) rules for this Source Modification included the CVD-21 unit and flare in addition to the flares, CVD-2 expansion, and CVD's 15 through 20 reviewed under CP 141-9999-00172).

The current application for three (3) new CVD units (22-24) was received on October 28, 1999. In December, 1999, AlliedSignal, Inc., changed the company name to Honeywell International, Incorporated.

Enforcement Issue

The source has the following enforcement actions pending:

(1) IDEM is aware that some of the emission units at the source may have been constructed and operated prior to receipt of a construction and operation permit. IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules for the new facilities only.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (scfm)	Temperature (^{0}F)
S-FL-22	CVD-22 flare	40	3.2	2890	1000
S-FL-23	CVD-23 flare	40	3.2	2890	1000
S-FL-24	CVD-24 flare	40	3.2	2890	1000

Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 28, 1999. Additional information was received on November 10, 1999.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (1 page).

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year) *
PM	0.0
PM-10	0.0
SO_2	0.0
VOC	179.2
CO	0.0
NO_x	0.0

HAP's	Potential To Emit (tons/year) *
benzene	18.4
toluene	1.9
styrene	1.8
TOTAL	22.1

* PTE before controls for the new CVDs (Nos. 22, 23 and 24) is based on 5800 maximum hours of operation in the soak phase for the non-woven process and the assumption that stack test results taken during the third quarter of the soak phase are a conservative estimate of the emission rate over the entire soak phase.

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(f)(4)(D) because the potential to emit volatile organic compounds (VOC) is equal to or greater than twenty-five (25) tons per year.

County Attainment Status

The source is located in St. Joseph County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	maintenance attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_X) are precursors for the formation of ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. St. Joseph County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) St. Joseph County has been classified as attainment or unclassifiable for PM10, SO_2, and CO. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Pollutant	Emissions (ton/yr)
PM	0.8
PM10	0.0
SO_2	0.0
VOC	678.0
CO	0.0
NO_x	0.0

These emissions are estimated actual emissions based on the AIRS Facility Quick Look Report, dated July 24, 1997.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
CVDs 22-24 with flares	0.0	0.0	0.0	3.6	32.4	3.2	0.4
PSD Significant Threshold	25	15	40	40	100	40	N.A.

(a) This modification is not major under PSD because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

(b) For the purpose of review under the PSD requirements, this modification has been considered a separate and distinct "project" from the emission units previously permitted in Construction Permit No. 141-9999-00172 and Source Modification 141-10759-00172 based on review of the available USEPA guidance on circumvention.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source has submitted their Part 70 (T-141-7442-00005) application on December 10, 1996. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.

Federal Rule Applicability

There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.

There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of VOC and it is located in St. Joseph County. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by April 15 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4.

326 IAC 5-1-2 (Visible Emissions Limitations)

This source, which is located in St. Joseph County north of Kern Road and east of Pine Road, is subject to 326 IAC 5-1-2 (Visible Emission Limitations) which limits visible emissions from a source or facility. Pursuant to 326 IAC 5-1-2, except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

(a) Visible emissions shall not exceed an average of thirty percent (30%) opacity in twenty-four (24) consecutive readings, as determined in 326 IAC 5-1-4.

(b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 2-4.1-1 (New Source Toxics Control)

Each CVD unit is independently distinguishable from the other units as a "process or production unit" as defined in 40 CFR 63.41 (incorporated by reference in 326 IAC 2-4.1). The potential to emit (PTE) of combined hazardous air pollutants (HAPs) for each CVD is less than 25 tons per year and the potential to emit (PTE) of any single HAP is less than 10 tons per year (see Appendix A of the TSD for detailed calculations). Therefore, the requirements of this rule do not apply.

326 IAC 6-1-2 (Nonattainment Area Particulate Limitations)

This source is not subject to the provisions of 326 IAC 6-1-2 because although the source is located in St. Joseph County, it does not have specific emission limits listed in 326 IAC 6-1-18, and it does not have the potential to emit 100 tons or more of PM per year or have actual emissions of 10 tons or more of PM per year.

326 IAC 8-1-6 (New Facilities, General Reduction Requirements)

This rule is applicable to CVDs because the units will be constructed after January 1, 1980, and has the potential uncontrolled emissions greater than 25 tons per year.

Enclosed flares have been accepted as BACT for control of the VOC emissions from the CVD units. All exhaust process gas from the CVD shall be directed to and combusted by the unit's internal flare and the flare shall achieve an overall destruction efficiency of at least 98% volatile organic compounds.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The CVD units and flare controls have applicable compliance monitoring conditions as specified below:

(a) To monitor the volatile organic compound (VOC) load to the control flare, the permittee shall measure the input rate of total reactant gas to the CVD unit once per day over the entire batch cycle and the number and type of brake disks in each batch.

(b) The enclosed flare shall have a flame present at all times that the CVD unit is in operation. A thermocouple or equivalent device shall be installed and operated to

monitor the presence of a pilot flame and to sound an alarm when the flame is not detected. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit. In the event that a breakdown of the monitoring equipment occurs, the Permittee shall supplement monitoring with visual checks once per hour to ensure that a flame is present.

(c) The Permittee shall include in its PMP a maintenance program to inspect regularly the thermocouple or equivalent device for monitoring and recording the presence of a pilot flame, and to conduct routine maintenance and calibration on such monitors.

Conclusion

The construction and operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 **Significant Source Modification No. 141-11511-00172**.

Appendix A: Emission Calculations
Evaluation of CVD Uncontrolled and Controlled Emissions

Company Name: AlliedSignal, Inc.
Address City IN Zip: 3520 Westmoor Street, South Bend, Indiana 46628
Significant Source Mod. No.: 141-11511-00172
Reviewer: Janusz Johnson
Date: December 13, 1999

A maximum VOC emission rate in pounds per hour was derived from the results of stack testing performed on April 27 through the 29, 1999. The maximum uncontrolled emission rate observed during the soak phase of the non-woven process was 20.6 pounds per hour of VOC. The maximum uncontrolled emission rate observed during the soak phase of the random process was 4.87 pounds per hour VOC. These results have been utilized as the basis of the emissions calculations for the CVD units below.

CVD-22, CVD-23 and CVD-24

Uncontrolled Potential To Emit from each CVD (based on non-woven process as worst case):

20.6 lbs VOC/hr x 5800 max hrs soak/year x 1 ton / 2000 lbs = 59.7 tons VOC per year

Controlled Potential To Emit from each CVD (including flare combustion emissions):
The internal flare is assumed to provide at least 98% control of the VOC emissions. Actual VOC control efficiencies determined during stack testing of similar units ranged from 98.6% to 99.3% for the non-process and was 99.9% for the random fiber process.

Potential VOC emissions after control are based on 98% destruction of the potential uncontrolled VOCs.

VOC: 59.7 tons VOC per year x (1 - 0.98) = 1.2 tons controlled VOC emissions

Potential emissions of NOx from the flare are based on AP-42 emission factors for flares (Section 13.5-4). Potential emissions of CO from the flare are based on the worst case 3.66 lbs/hr average emission rate determined in stack testing conducted on CVD-18 on April 27-29, 1999.

It is assumed that the process gas has same volume as natural gas fed into CVD, but a lower heat content of 762 Btu/CF:

CVD annual volume of process gas = 5800 hours in soak per year x 7000 scfh natural gas = 40600000.0 CF per year

NOx: 40600000.0 CF per year x 762 Btu/CF x 6.8e-8 lb NOx/Btu x 1 ton/2000 lbs = 1.1 tons NOx per year
CO: 3.66 lbs CO/hr x 5800 max hrs soak / year x 1 ton/2000 lbs = 10.6 tons CO per year

Hazardous Air Pollutant (HAP) Emissions

Test results for a large CVD unit running non-woven process:

HAP	uncontrolled emission rate (lb/hr)	PTE before controls * (ton/yr)	PTE after controls (98% eff.) (ton/yr)
benzene	2.11	6.12	0.12
toluene	0.225	0.65	0.01
styrene	0.209	0.61	0.01

* lbs HAP/hr x 5800 max hrs soak/year x 1 ton / 2000 lbs = tons HAP/yr

Total PTE Summary

Uncontrolled PTE

Emission units	Potential to emit before controls (tons per year)						
	PM	PM10	SO2	NOx	VOC	CO	HAPs
CVD unit 22	0.0	0.0	0.0	0.0	59.7	0.0	7.4
CVD unit 23	0.0	0.0	0.0	0.0	59.7	0.0	7.4
CVD unit 24	0.0	0.0	0.0	0.0	59.7	0.0	7.4
TOTAL	**0.0**	**0.0**	**0.0**	**0.0**	**179.2**	**0.0**	**22.1**

Controlled PTE

Emission units	Potential to emit after controls, as limited (tons per year)						
	PM	PM10	SO2	NOx	VOC	CO	HAPs
CVD unit 22 and flare	0.0	0.0	0.0	1.1	1.2	10.6	0.1
CVD unit 23 and flare	0.0	0.0	0.0	1.1	1.2	10.6	0.1
CVD unit 24 and flare	0.0	0.0	0.0	1.1	1.2	10.6	0.1
TOTAL	**0.0**	**0.0**	**0.0**	**3.2**	**3.6**	**31.8**	**0.4**